

AMENDMENTS TO THE DRAWINGS:

Attached is a single replacement drawing sheet including Figs. 1 and 2 which should replace the single original drawing sheet including Figs. 1 and 2. Fig. 2 is amended to show an "identification means" and an associated reference numeral.

REMARKS

In response to the Office Action dated April 1, 2008, Applicants respectfully request reconsideration and withdrawal of the rejections of the claims.

Claim Objections

The Official Action objects to Claim 1, noting that it is unclear how the apparatus of Claim 1 is used in testing and how this device is interrelated to a testing apparatus. As claimed, the apparatus includes a main body and a leadframe support member. During testing, the leadframe support member supports a leadframe. The leadframe is formed with at least one row of non-singulated semiconductor devices. A groove in the leadframe support member receives the semiconductor devices, while leads from the semiconductor devices rest upon a surface of the leadframe support member during testing. While the leads are resting upon the surface, they are contacted by the test probes of the testing apparatus, for example as shown in Figure 16.

The question of how "this device" is interrelated to a "testing apparatus" is not completely understood by Applicant. As the question reads, "this device" appears to refer to the claimed apparatus, which is a component of the testing apparatus. Thus, it is not clear how there is a question of how the device is related to the testing apparatus. To the extent any question remains in this regard, Applicant kindly requests clarification.

The Official Action notes that is unclear how the main body is interrelated and associated with the leadframe support. Claims 1 and 13 are amended to recite that the leadframe support member is connected to the main body, thus clarifying how

the main body and support are interrelated. Withdrawal of this objection is respectfully requested.

The Official Action objects to Claim 10, noting that it is unclear what "an electrical grounding" comprises. A non-limiting example of an electrical grounding is described in the specification at paragraph [0052] of the U.S. Publication of this application. Here, it is discussed that metal plugs are inserted into guide holes that act to both align the main body with the source of compressed air to an inlet, and also function to ground the main body. Claim 10 is amended to recite that the main body includes holes for providing for an electrical grounding. Thus, the provision of an electrical grounding is an intended use of the holes in the main body, and the electrical grounding is not required to be shown in the drawings. Accordingly, withdrawal of this objection is respectfully requested.

The phrase "identification means", recited in Claim 12 is objected to as being unclear. A non-limiting example of identification means are discussed in the U.S. Publication of this application at paragraph [0041]. Here, it is noted that identification means may be electronically readable, so that a reader, reading the identification means, can send a signal to a control means to indicate that a particular carrier is entering the apparatus. Fig. 2 is amended to show the identification means. Further, the specification is amended to provide a reference numeral for the identification means. Accordingly, withdrawal of this objection is respectfully requested.

Claim 13 is objected to because of the phrase "means for coupling the main body with a transport mechanism." The U.S. Publication of this application discusses a non-limiting example of such means at paragraph [0049]. Here the

means in question is described as a "coupler assembly". The coupler assembly is provided at each end of the leadframe carrier main body and secures the underside of the main body and allows the carrier to be moved through the test probe. This assembly is shown in the drawings at Figs. 4, 12 and 13, identified with reference numeral 80. Because these "means" are described in the specification and shown in the drawings, withdrawal of this objection is respectfully requested.

Drawings

The objection to the drawings has been addressed above in the discussion of the "electrical grounding" and "identification means". Accordingly, withdrawal of this objection is respectfully requested.

Rejections Under 35 U.S.C. § 103(a)

Claims 1, 14 and 15 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Davis, Jr. ("Davis", U.S. Patent No. 3,961,415). Davis pertains to a carrier for mounting a semiconductor chip. The carrier 10 includes a groove 12, where a chip 38 is received. A bar or ribbon 46 is attached to the chip at an emitter pad 38a, and includes ends 50, 52 attached to metallization layers 26, 30. The device aims to minimize emitter inductance of a semiconductor chip package.

In rejecting Claim 1, the Official Action takes the position that the carrier 10 corresponds to the claimed leadframe support member. The Official Action correctly recognizes that Davis does not show the apparatus including a main body, but concludes that a main body would have been obvious to include, because the carrier 10 is likely to be supported by something (i.e., a main body).

Claim 1 provides for, *inter alia*, an apparatus comprising “a main body and a leadframe support member.” Thus, the main body is a feature of the apparatus. In Davis, the apparatus as a whole is embodied by the carrier 10. Any element that supports carrier 10, or that carrier 10 rests on, would not be a feature of the carrier 10. Thus, the position set forth in the Official Action still does not provide for an apparatus comprising a main body, recited in Claim 1.

To the extent a separate, unrelated element can be considered as a main body of the apparatus, the features of Claim 1 are still not met. Amended Claim 1 recites, *inter alia*, the leadframe support member being connected to the main body. Thus, the main body of the apparatus includes specific relationship to the leadframe support member (i.e. a connection) that is not disclosed by the prior of art of record. Further, there would be no reason to modify the unrelated support member in the manner claimed. Because Davis does not disclose a leadframe support member connected to the main body member, the rejection is not supported.

Moreover, amended Claim 1 also recites that during the testing operation, test probes from a test probe head are electrically connected with leads extending from the semiconductor devices. Davis fails to disclose this aspect of Claim 1. In Davis, the chip 38 has bar or ribbon 46 welded thereto. The ribbon 46 is also welded at its ends 50, 52 to the metallized layers 26, 20. Silver or gold ribbon leads 40, 32 are coupled to metallized layer portions 34, 36. However, Davis does not relate to the testing of semiconductor devices. Rather, it is concerned with mounting a high frequency transistor on a carrier. As such, it does not disclose a test probe head having test probes. Moreover, it does not disclose that test probes electrically connected with the leads of a semiconductor device rest upon the surface of the

carrier. Because Davis does not disclose the leads of a semiconductor device resting on the surface of the carrier are contacted by test probes, withdrawal of this rejection is respectfully requested. For at least the reasons cited above, allowance of Claim 1 is respectfully requested.

Claims 1, 2 and 11 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Patadia et al ("Patadia", U.S. Patent No. 6,170,676). Patadia pertains to a foldable dish drainer. The dish drainer 15 includes a base member 16 having base sections 17, 18, 19. The base sections are continuously formed and include grooves 31, 32, 33, 34. The Official Action identifies the base member 16 as corresponding to the claimed leadframe support member. The Official Action correctly recognizes that Patadia does not disclose the apparatus including a main body. However, the Official Action takes the position that the dish drainer may be placed on the surface of the sink, and thus, the surface of the sink may serve as a main body. The Official Action concludes that it would have been obvious to include such a main body in the apparatus of Patadia.

As discussed above, Claim 1 provides for an apparatus including both a main body and leadframe support member. Thus, the main body is a feature of the apparatus. The position set forth by the Official Action relies on the surface of sink to show the claimed main body. However, the surface of the sink is a separate and distinct element from the dish drainer 15. Thus, the surface of the sink is not a feature of the dish drainer (i.e., the dish drainer is not comprised of the surface of the sink). Because the surface of the sink is not a feature of the dish drainer, Patadia fails to disclose an apparatus comprising both a leadframe support member and a main body.

To the extent this interpretation is maintained, Patadia still fails to disclose other features of Claim 1, as amended. Amended Claim 1 provides the leadframe support member being connected to the main body of the apparatus. While there is no disclosure whatsoever of how the dish drainer is arranged relative to the surface of a sink or other element, it appears the dish drainer merely rests on a surface. There is no disclosure of the dish drainer being connected to the surface, nor is there any reason to modify the dish drainer and surface so that they are connected as claimed.

Additionally, amended Claim 1 provides that during the testing operation, test probes from a test probe head are electrically connected with leads extending from the semiconductor devices. This aspect of Claim 1 is not disclosed by Patadia. In fact, Patadia does not relate to the testing of semiconductor devices. Rather, Patadia is concerned with providing drainage for dishes on a rack. Thus, Patadia does not disclose a test probe head, or any electrical connection. Additionally, there has been no showing that the dish drainer of Patadia would be suitable or is capable of being used to support leadframe during a testing operation, as claimed. Because Patadia does not disclose the leads of a semiconductor device resting on the surface of the carrier are contacted by test probes, withdrawal of this rejection is respectfully requested. Accordingly, allowance of Claim 1 is respectfully requested.

Dependent claims 2, 11, 14 and 15 ultimately depend from Claim 1 which is allowable for the reasons discussed above. Because these dependent claims depend from an allowable claim, these claims are also allowable.

Claims 3-10, 12 and 13 were not rejected in light of any prior art. While not specifically addressed in the Official Action, it is presumed that these claims include

allowable subject matter. Further, Claim 13 is amended to recite features similar to those incorporated into amended Claim 1.

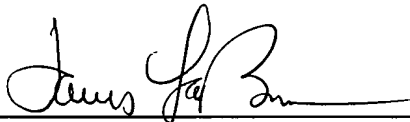
Claims 16 and 17 are newly added for consideration. Claim 16 further distinguishes the relationship between the leadframe support member and the main body. Claim 17 further distinguishes the means for coupling. Support for these amendments is found in paragraphs [0043] and [0041] of the U.S. Publication of this application. No new matter added.

Reconsideration and withdrawal of the rejections, and allowance of all pending claims is respectfully requested.

Respectfully submitted,

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